

99689-00019

Amendment to the Claims

This listing of the claims will replace all prior versions, and listings of the claims of the application. Applicant asserts that the currently amended claims contain no new matter.

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Currently Amended) A cell-free composition for the modification of DNA sequence comprising:
 - a. a duplex DNA comprising a target sequence;
 - b. an oligonucleotide capable of introducing a site specific, predetermined change in said target sequence, wherein said oligonucleotide ~~comprises~~ consists of a single stranded DNA oligonucleotide that forms a DNA duplex;
 - c. a cell-free extract of a plant cell; and
 - d. a reaction buffer;

99689-00019

wherein the duplex DNA comprising the target sequence is a plasmid, bacteriophage, or bacterial artificial chromosome.

14. (Previously Presented) The composition of claim 13, wherein said oligonucleotide comprises at least 20 and less than or equal to 200 nucleotides.
15. (Canceled)
16. (Previously Presented) The composition of claim 13, wherein said oligonucleotide comprises a single 3' end and a single 5' end.
17. (Currently Amended) The composition of claim 13, wherein said duplex DNA comprising the target sequence is a portion of a gene of interest that is operably linked to a promoter, so that said gene of interest can be expressed in a host organism.
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Canceled)
25. (Canceled)
26. (Canceled)
27. (Canceled)
28. (Canceled)
29. (Currently Amended) The composition of claim 13, wherein said oligonucleotide ~~comprises~~ consists of a contiguous single-stranded self-complementary DNA oligonucleotide having a 3' end and a 5' end, wherein said 3' end and said 5' end are

99689-00019

juxtaposed and wherein at least five contiguous nucleotides are Watson-Crick base paired, the sequence of said oligonucleotide comprising a template for said modified DNA sequence.

30. (Currently Amended) The composition of claim 29, wherein said duplex DNA comprising the target sequence is a portion of a gene of interest that is operably linked to a promoter, so that said gene of interest can be expressed in a host organism.

31. (Currently Amended) The composition of claim 30, wherein said duplex DNA comprising the target sequence is a plasmid.

32. (Currently Amended) The composition of claim 17, wherein said duplex DNA comprising the target sequence is a plasmid.

33. (Currently Amended) A cell-free composition for the modification of DNA sequence comprising:

a. a duplex DNA comprising a target sequence;

b. an oligonucleotide capable of introducing a site specific, predetermined change in said target sequence, wherein said oligonucleotide ~~comprises~~ consists of a DNA duplex;

c. a cell-free extract of a plant cell; and

d. a reaction buffer;

wherein the duplex DNA comprising the target sequence is a plasmid, bacteriophage, or bacterial artificial chromosome.

34. (Previously Presented) The composition of claim 33, wherein said oligonucleotide comprises at least 20 and less than or equal to 200 nucleotides.

35. (Previously Presented) The composition of claim 33, wherein said oligonucleotide comprises at least 10 and less than or equal to 100 Watson-Crick nucleotide pairs.

36. (Previously Presented) The composition of claim 33, wherein said oligonucleotide comprises a single 3' end and a single 5' end.

99689-00019

37. (Currently Amended) The composition of claim 33, wherein said duplex DNA comprising the target sequence is a portion of a gene of interest that is operably linked to a promoter, so that said gene of interest can be expressed in a host organism.
38. (Currently Amended) The composition of claim 33, wherein said oligonucleotide ~~comprises~~ consists of a contiguous single-stranded self-complementary DNA oligonucleotide having a 3' end and a 5' end, wherein said 3' end and said 5' end are juxtaposed and wherein at least five contiguous nucleotides are Watson-Crick base paired, the sequence of said oligonucleotide comprising a template for said modified DNA sequence.
39. (Currently Amended) The composition of claim 38, wherein said duplex DNA comprising the target sequence is a portion of a gene of interest that is operably linked to a promoter, so that said gene of interest can be expressed in a host organism.
40. (Currently Amended) The composition of claim 39, wherein said duplex DNA comprising the target sequence is a plasmid.
41. (Currently Amended) The composition of claim 37, wherein said duplex DNA comprising the target sequence is a plasmid.